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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/502,299	07/22/2004	Michael James Baker	608-432	1587
23117	7590	06/28/2005	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			HAILEY, PATRICIA L	
			ART UNIT	PAPER NUMBER
			1755	

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/502,299

Applicant(s)

BAKER ET AL

Examiner

Patricia L. Hailey

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 39-75 is/are pending in the application.
- 4a) Of the above claim(s) 67-70 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 39-66 and 71-75 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 22 July 2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

*Election/Restrictions*

1. Applicant's election of Group I, claims 39-66 and 71-75 in the reply filed on March 30, 2005, is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Applicants made no indication of traversing the election.

2. Claims 67-70 are hereby withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected process for the purification of a waste stream, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on March 30, 2005.

*Priority*

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Applicants' Priority Document was filed on January 19, 2005.

*Claim Objections*

4. Claim 39 is objected to because of the following informalities:

In line 6 of claim 38, there is a period (".") after the word "particles", yet the claim ends after step (g).

Appropriate correction is required.

*Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. *Claims 39-66 and 71-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker et al. (U. S. Patent No. 6,534,438).*

Baker et al. disclose a process for preparing a catalyst, said catalyst useful for the preparation of vinyl acetate monomer (col. 2, lines 57-60; col. 7, lines 8-25), wherein microspheroidal support particles (e.g., silica) are impregnated with a palladium compound in a suitable solvent. See col. 4, lines 47-64 of Baker et al., which also discloses exemplary palladium compounds such as palladium acetate, sulfate, nitrate, chloride, etc., as suitable impregnating compounds.

The process may also comprise the steps of impregnating the aforementioned support particles with gold, copper (a Group I metal), cerium (a lanthanide), or mixtures thereof, either together with or separately from the impregnation of the particles with Group VIII noble metal (i.e., palladium). Exemplary gold compounds include gold chloride, dimethyl gold acetate, barium acetate, tetrachloroauric acid, etc. See col. 5, lines 11-40 of Baker et al., which also discloses additional metals suitable for impregnation, and compounds of these metals for doing so.

The impregnation of the support particles may be performed using any suitable technique, such as incipient wetness. The impregnation is usually performed at ambient temperatures, but temperatures ranging between about 60°C and 120°C may also be employed. See col. 5, lines 41-54 of Baker et al.

During the impregnation process, the impregnated support particles may optionally be dried, and the impregnation steps may be repeated, depending on the

metal loadings. Drying may be performed at ambient temperature and reduced pressure, and in air, nitrogen, helium, carbon dioxide, or any suitable inert gas. Further, the catalyst composition may be tumbled, rotated, or agitated by the gas stream, or by mechanical means to aid in drying. See col. 5, lines 55-65 of Baker et al.

Baker et al. also disclose the performance of washing steps to remove anion contaminants (col. 5, line 66 to col. 6, line 16), as well as a reducing agent such a hydrazine (e.g., a hydrazine concentration in water of up to 20 wt. %). See col. 6, lines 20-59 of Baker et al.

Patentees' catalyst comprises up to 4 wt. % palladium (col. 4, lines 44-46), and up to about 3 wt. % gold (col. 5, lines 4-7).

Although Baker et al. do not specifically disclose Applicants' claimed steps in the order in which they are recited, the reference teaches a method comparable to that instantly claimed. With respect to Applicants' claim limitations regarding the agitation of the support particles during impregnation, it is considered that such a step would have been within the level of ordinary skill in the art to be performed in an endeavor to maximize the contact between the support particles and the impregnating solutions, thus obtaining an optimal amount of catalyst components loaded onto the support particles.

*Conclusion*

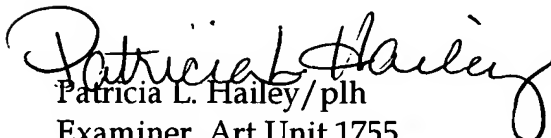
9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Hailey whose telephone number is (571) 272-1369. The examiner can normally be reached on Mondays-Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 1700 Receptionist, whose telephone number is (571) 272-1700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Patricia L. Hailey/plh  
Examiner, Art Unit 1755  
June 23, 2005

  
J. A. LORENZO  
SUPERVISORY PATENT EXAMINER